



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/569,865	03/14/2006	Manfred Niederhufner	NIEDERHUFNER ET AL 1 PCT	9738
25889	7590	11/19/2008	EXAMINER	
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			BINDA, GREGORY JOHN	
			ART UNIT	PAPER NUMBER
			3679	
			MAIL DATE	DELIVERY MODE
			11/19/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/569,865	Applicant(s) NIEDERHUFNER ET AL.	
	Examiner Greg Binda	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 5-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3679

Election/Restrictions

1. Applicant's election with traverse of the fixed homokinetic joint shown in Fig. 1 (Species I) in the reply filed on Oct. 10, 2008 is acknowledged. The traversal is on the ground(s) that a search for the elected species would include a search for the unelected species as well and thus there would be no undue burden on the examiner. This is not found persuasive because: (1) the search required for the elected species would not include a search for the unelected species since the structural differences between the species would necessitate additional search, and (2) examination is not simply limited to search. In addition to the search, much of the examination is devoted to determining patentability of claims. Said determination requires the formulation of rejections and responding to applicant's arguments with regard to same. The additional search and the determination of patentability for multiple, patentably distinct species would place serious burden on the examiner.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 5-8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on Oct. 10, 2008.

Drawings

3. The drawings are objected to because:

a. They fail to show:

Art Unit: 3679

- i. The angles recited in claim 4
 - ii. The strap and spring ring recited in claim 11.
 - iii. The sheet metal ring recited in claim 12.
 - iv. The shaft recited in claim 16.
 - b. Fig. 1 includes an inappropriate cross hatch pattern for the rubber bellows 11. See MPEP § 608.02 for the appropriate pattern.
4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 3679

Specification

5. The disclosure is objected to as failing to comply with 37 CFR 1.77(c) for failing to include section headings.

6. The detailed description of the invention is objected to as failing to provide proper antecedent basis for the subject matter in claims 11-13 & 16.

7. The abstract of the disclosure is objected to because it begins a phrase that can be implied. See MPEP § 608.01(b).

Claim Objections

8. The claims are objected to as failing to comply with 37 CFR 1.75(i) because elements of the claims are not separated by line indentation.

9. Claim 9 is objected to because in line 3, the word “said” or “the” should be inserted prior to “radially”.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 3679

11. Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 4 recites the limitations, “maximal operational incline angle . . . amounts to approximately 10°” and “maximal installation incline angle is greater than 10°”. The specification fails to disclose how these capabilities are achieved. There is no teaching of any particular structural feature which provides the capabilities.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 13 & 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 13 contains the limitation “70 Shore”. Where a government or industry standard is used in a claim as a limitation, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph because the claim scope is uncertain since standards are subject to change over time. In order to overcome this rejection, the effective date of the standard applied should be included in the specification (no new matter can be entered). Applicant is encouraged to file a copy of the standard, (excerpts of the applicable portions are acceptable), via an information disclosure statement filed in accordance with 37 CFR 1.97 and 1.98.

Art Unit: 3679

- b. Claim 14 recites the limitation "the side" in line 3, but the element whose side is "the side" is unidentified.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 1, 2, 11, 12 & 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Gees, US 4,869,556. The figure shows a constant velocity joint having an inner hub 4, 14 and an outer hub 3, in which several tracks assigned to one another in pairs are provided, in each instance, in which balls 5 guided in a cage are accommodated to transfer a torque between the inner hub and the outer hub, and having a sealing arrangement 15 for sealing the constant velocity joint on at least one side, wherein the sealing arrangement has a set of rubber bellows 15, which is articulated onto the outer hub (see also col. 2, lines 44 & 45) with its radially outer edge, and is attached in stationary manner to the inner hub, with its radial inner edge.

17. Claims 1-3, 9-12 & 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Sharp, US 3,017,756. Fig. 1 shows a constant velocity joint 10 having an inner hub 12 and an outer hub 14, in which several tracks 46, 60 assigned to one another in pairs are provided, in each instance, in which balls 22 guided in a cage 24 are accommodated to transfer a torque

Art Unit: 3679

between the inner hub and the outer hub, and having a sealing arrangement 34 for sealing the constant velocity joint on at least one side, wherein the sealing arrangement has a set of rubber bellows 34, which is articulated onto the outer hub and/or a carrier housing 16 that surrounds the latter, with its radially outer edge 102, and is attached in stationary manner to the inner hub, with its radial inner edge 104. Fig. 1 shows the radially outer edge 102 of the bellows 34 is crimped and/or clamped into a cap 36 that surrounds the carrier housing 16 at least in certain regions. Fig. 1 shows the inner edge 104 of the set of bellows 34 is fixed on the inner hub 12 by means of a metal ring 38. Fig. 1 shows a closure lid 18 is provided on the side that faces away from the set of bellows 34.

18. Claims 1-3, 9, 11, 12 & 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al, US 3,688,521 (Smith). Fig. 1 shows a constant velocity joint having an inner hub 29 and an outer hub 26, in which several tracks 30, 13 assigned to one another in pairs are provided, in each instance, in which balls 31 guided in a cage 37 are accommodated to transfer a torque between the inner hub and the outer hub, and having a sealing arrangement 38 for sealing the constant velocity joint on at least one side, wherein the sealing arrangement has a set of rubber bellows 38, which is articulated onto the outer hub and/or a carrier housing 25 that surrounds the latter, with its radially outer edge 40, and is attached in stationary manner to the inner hub, with its radial inner edge 39. Fig. 1 shows the radially outer edge 40 of the bellows 38 is crimped and/or clamped into a cap 46 that surrounds the carrier housing 25 at least in certain regions. Fig. 1 shows the inner edge 39 of the set of bellows 38 is fixed on the inner hub 29 by

Art Unit: 3679

means of a metal ring. Fig. 1 shows a closure lid 12 is provided on the side that faces away from the set of bellows 34.

19. Claims 1-3, 9-12 & 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Fisher, US 3,822,570. Fig. 1 shows a constant velocity joint having an inner hub 14 and an outer hub 10, in which several tracks 17, 18 assigned to one another in pairs are provided, in each instance, in which balls 16 guided in a cage 19 (see also col. 3, line 7) are accommodated to transfer a torque between the inner hub and the outer hub, and having a sealing arrangement 22 for sealing the constant velocity joint on at least one side, wherein the sealing arrangement has a set of rubber bellows 22, which is articulated onto the outer hub that surrounds the latter, with its radially outer edge 23, and is attached in stationary manner to the inner hub, with its radial inner edge 24. Figs. 1-3 show the radially outer edge 23 of the bellows 22 is crimped and/or clamped into a cap 31 that surrounds the outer hub 10 at least in certain regions. Fig. 1 shows the inner edge 24 of the set of bellows 22 is fixed on the inner hub 14 by means of a metal ring 46. Fig. 1 shows a closure lid 11 is provided on the side that faces away from the set of bellows 34.

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3679

21. Claims 4 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Gees, Sharp, Smith and Fisher. Each of Gees, Sharp, Smith and Fisher shows a constant velocity joint comprising every limitation of the claims except none expressly discloses the maximal operational angle equal to 10° , the maximal installation angle greater than 10° , or the rubber bellows having a hardness of 70 Shore. However, it would have been obvious to one of ordinary skill in the art to design the maximal operational angle equal to 10° , the maximal installation angle greater than 10° , or the rubber bellows having a hardness of 70 Shore in any one of Gees, Sharp, Smith and Fisher, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3679

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg Binda/
Primary Examiner
Art Unit 3679